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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/356,845	07/19/1999	JOHN DAVID KAEWELL JR.	I-1-50.5US	8408

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PHILADELPHIA, PA 19103

EXAMINER

BOCURE, TESFALDET

ART UNIT	PAPER NUMBER
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2631

DATE MAILED: 05/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/356,845

Applicant(s)

KAEWELL JR. ET AL.

Examiner

Tesfaldet Bocure

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— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11,13-23,25-27 and 29-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11,13-23,25-27 and 29-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 11,13-23,25-27 and 29-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Schlosser et al.** (US patent number 3,879,581, of a record).

Schlosser teaches a communication system having a repeater station (100) (claimed primary) for communicating with a plurality of subscriber stations (not shown, see subscriber line in figure 1) and data terminals (110), wherein the repeater terminal comprising means and steps for: receiving an information signal from one of the subscriber stations using an up-link channel and slot through a data terminal (110); detecting the received up-link signal from the terminal and the sync signal and assigning

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a sync. Signal in a corresponding time slot for transmitting to the receiving end on the assigned time slot and frequency (2a-2f and claims 1-6) as in claims 11,13,15,16,19,22,26 and 30. The repeater unit modifies the received up-link signals to be transmitted and assigns the down-link time slot without the knowledge of the data terminals and subscriber units, and therefore it is transparent to both the subscriber and the data terminals.

Further to claims 14,17 and 20, the data terminals and the subscriber station (not shown) are outside the operating range.

The time slots in figures 2a-2f having a corresponding up-link and downlink frequencies (800 channels) as in claims 23,27 and 30, and the sync. information and control field transmitted by the spacecraft 100 will be used by the data terminals to be synchronized as in claim 32.

The repeater unit (100) modifies the received signal to be transmitted to the receiving end, therefore, reads on the claimed equalizing the received signal before retransmitting as in claims 25,29 and 31.

The wideband downlink (121) includes a synchronization and control field, which is utilized by the spacecraft to interrogate and call the data terminals in order to set up a circuit connection, to provide time reference for uplink synchronization of the terminals (see col. 4, lines 41-59), reads on the newly claimed secondary station aligning its frame timing according to the received signal in claims 11,15 and 19. The repeater unit is a radio transceiver reads on the claimed transmitter and receiver embedded on radio as in claims 18 and 21.

What **Schlosser** fails to teach is that the repeater unit 100 synchronizing itself with the timing of the data terminals. However, Schlosser teaches that repeater station transmits an error signal to the subscriber stations after measuring the unique ward

received within the burst signal. However, as claimed, whether the repeater station dictates the synchronization of the data terminal, the overall idea is that the data terminals are synchronized to each other through the repeater unit (global synchronization).

Therefore, it would have been obvious to one of an ordinary skill in the art to use the synchronization method of Schlosser, using the repeater timing to synchronize the data terminals rather than the data terminals' timing to synchronize the repeater unit at the time the invention was made.

Response to Arguments

3. In response to Applicant's Argument regarding to claim 11,13-23,25-27 and 29-32 that:

---The independent claims now define the base stations as controlling the synchronization. This is significantly different from the description of the Schlosser et al. patent because in Schlosser there is no suggestion of synchronizing the timing of its downlink transmission with the received signals. As previously pointed out, the spacecraft clearly dictates the timing to the data terminals---.

Accordingly, there is no suggestion to the prior art of record to provide synchronization of the secondary units operating in a separate timeslots achieved by the secondary units. It is believed that the amended claims clarify that the primary station synchronized its timing to the base station and further has a secondary station synchronized its timing with the primary station---.

As shown in figures 2a-2f and claimed in claims 1-6 of the art of record, Schlosser, the spacecraft assigns timing slot in a given frequency to the plurality of data terminals. Therefore, the spacecraft dictates the timing of the plurality of data terminals.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

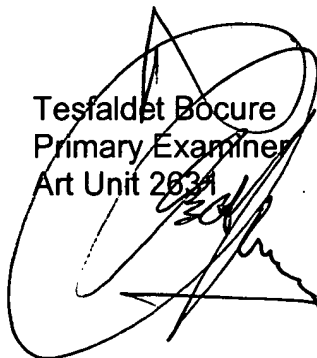
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tesfaldet Bocure whose telephone number is (703) 305-4735. The examiner can normally be reached on Mon-Thur (7:30a-5:00p) & Mon.-Fri (7:30a-5:00p).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad H Ghayour can be reached on (703) 306-3034. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Tesfaldet Bocure
Primary Examiner
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A large, stylized handwritten signature in black ink, which appears to be 'Tesfaldet Bocure', is written over the typed name and title.

T.Bocure